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10/780,323	02/17/2004	David Szymanski	INDI 200002US01	1107

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Cleveland, OH 44115

EXAMINER
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DEXTER, CLARK F

ART UNIT	PAPER NUMBER
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3724

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09/10/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,323	<b>Applicant(s)</b> SZYMANSKI, DAVID	
	<b>Examiner</b> Clark F. Dexter	<b>Art Unit</b> 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-27,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 11,17,21,22,25-27,29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-16,18-20,23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. The amendment filed on June 23, 2010 has been entered.

### ***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 16, 18, 19, 20, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, the recitation "at each end" is vague as to whether it refers to the base member or the associated connecting link; in lines 11-12, the recitation "relative to a direction of intended chain travel" renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention; similarly, in line 13, the recitation "relative to a direction opposite of intended chain travel" renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention.

In claim 15, line 4, the recitation "at each end" is vague as to whether it refers to the base member or the associated connecting link; in line 10, the recitation "relative to a direction opposite of intended chain travel" renders the claim vague and indefinite

since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention.

In claim 16, line 4, the recitation "relative to a direction of travel of said cutting member" renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention; also in line 4, the recitation "a chain" is vague as to whether it refers to that previously set forth (e.g., in claim 15) or to another such chain.

In claim 18, line 3, the recitation "at each end" is vague as to whether it refers to the base member or the associated connecting link; in lines 5-6, the recitation "relative to a direction of intended travel of the base member when fastened on the chain" renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention; similarly, in lines 6-7, the recitation "relative to a direction opposite of intended travel of the base member" renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention; in line 9, the recitation "an associated cutting member" is vague as to whether it refers to that previously set forth or to another such cutting member; in lines 10-11, the recitation "comprising no more than 0.5° to the mating taper of said associated cutting member" is vague and indefinite since the base member is being positively defined in terms of the cutting member which is not part of the claimed invention (i.e., a base member).

In claim 19, line 4, the recitation “at each end” is vague as to whether it refers to the base member or the associated connecting link; in lines 10-11, the recitation “relative to a direction of intended chain travel” renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention; similarly, in line 12, the recitation “relative to a direction opposite of intended chain travel” renders the claim vague and indefinite since the structure of the link is being positively defined in terms of the chain and an intended use thereof which is not set forth as part of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### Rejections Over Wright:

5. Claims 1-3, 6-9, 12, 15, 18-20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over one of Wright, pn 4,744,278 in view of Funakubo, pn 3,800,633.

**Regarding claims 1-3, 6-9 and 12**, Wright discloses a **link** for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 52), having a lead end and a rear end, adapted to be pivotally connected an associated connecting link at each end forming said saw chain (e.g., member 52 is "adapted" in that it has pivot openings 57 and is fully capable of being pivotally connected to other structure including at each end of various forms of associated connecting links), said base member comprising a seat surface having a first taper (e.g., the upper surface of 65 as viewed in Fig 7) and a lower surface having a second taper; and

a cutting member (e.g., 54) that comprises a cutting edge and releasably engages said base member, said cutting member including an upper surface having a third taper and an under surface having a fourth taper, wherein said first taper and said third taper extend at an angle ranging from about 0.5 to about 45 degrees relative to a direction of intended chain travel and said second taper and said fourth taper extend at an angle of about 0.5 to about 45 degrees relative to a direction opposite of intended chain travel, wherein each of said pairs of tapers is at a close tolerance effective to cause self-locking engagement of said first taper of said seat surface and said third taper of said cutting member surface and of said second taper of said lower surface and said fourth taper of said cutting surface;

[claim 2] wherein said close tolerance comprises no more than about 1 degree (as best understood);

[claim 3] wherein said close tolerance comprises no more than 0.5 degrees (as best understood);

[claim 12] wherein at least one of said cutting member and said base member comprises a water-resistant material applied by a process selected from the group consisting of steam treatment, resin infiltration, copper infiltration and loctite infiltration (e.g., the base material in Wright is disclosed as “investment case of hard, high strength steel” which is a water-resistant material, and because the product is disclosed, the process by which the product is made is not critical).

**Regarding claim 15**, Wright discloses a **link** for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 52), having a lead end and a rear end, adapted to be pivotally connected to a connecting link at each end forming said saw chain (e.g., member 52 is “adapted” in that it has pivot openings 57 and is fully capable of being pivotally connected to other structure including at each end of various forms of associated connecting links), said base member comprising a seat surface (e.g., the upper surface of 65 as viewed in Fig 7) having a first taper and a lower surface having a second taper; and

a cutting member (e.g., 54) that comprises a cutting edge and releasably engages said seat surface of said base member, said cutting member including an upper surface with a third taper and an under surface with a fourth taper, said second taper and said fourth taper extending at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended chain travel.

**Regarding claim 18**, Wright discloses a **base member** (e.g., 52) with almost every structural limitation of the claimed invention including being adapted to be

pivotally connected to a connecting link at each end forming said saw chain (e.g., member 52 is “adapted” in that it has pivot openings 57 and is fully capable of being pivotally connected to other structure including at each end of various forms of associated connecting links), the base member comprising:

a seat surface (e.g., the upper surface of 65 as viewed in Fig 7) having an upper taper extending at an angle ranging from about 0.5° to about 45° relative to a direction of intended travel of the base member when fastened on the chain (e.g., the base member is fully capable of being positioned in such an orientation, particularly based on what structure it is attached/mounted) and a lower taper extending at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended travel of the base member when fastened on the chain, said upper taper being adapted to mate with a top taper on an associated cutting member and said lower taper being adapted to mate with a bottom taper on an associated cutting member, each taper having a close tolerance comprising no more than 0.5° to the mating taper of said associated cutting member (e.g., as best understood, particularly given that the cutting member is not part of the claimed base member);

**Regarding claims 19, 20, 23 and 24,** Wright discloses a **link** for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 52), having lead end and a rear end, adapted to be pivotally connected to a connecting link at each end forming said saw chain (e.g., member 52 is “adapted” in that it has pivot openings 57 and is fully capable of being pivotally connected to other structure including at each end of various forms of



associated connecting links), said base member comprising a seat surface (e.g., the upper surface of 65 as viewed in Fig 7) having a first taper, a lower surface having a second taper, and a stop surface (e.g., the rightmost upper vertical surface as viewed in Fig. 7) located upstream of said seat surface relative to the direction of travel of the chain; and

a cutting member (e.g., 54) that comprises a cutting edge and releasably engages said seat surface of said base member, said cutting member including an upper surface having a third taper (e.g., at 66) and an under surface having a fourth taper, wherein said first taper and said third taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of intended chain travel, and said second taper and said fourth taper extend at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended chain travel, wherein each pair of tapers is at a close tolerance effective to cause locking engagement of said first taper of said seat surface and said second taper of said cutting member surface;

[claim 20] wherein said close tolerance comprises no more than 0.5 degrees (as best understood);

[claim 23] wherein said first taper and said second taper extend upwardly or downwardly from a location near said cutting edge in a direction opposite to said direction of chain travel;

[claim 24] wherein said angle is about 10 degrees or less.

**Wright lacks** the specific material designations for each of the base member and the cutter member, as follows:

[claim 1] the link of a saw chain wherein said surface has the second taper constructed from sintered and compacted particles of abrasion resistant material;

[claim 6] wherein said base member comprises sintered and compacted particles of abrasion resistant material;

[claim 7] wherein said abrasion resistant material comprises at least one of metal and ceramic;

[claim 8] wherein said abrasion resistant material comprises a carbide containing compound;

[claim 9] wherein said carbide containing compound comprises a compound selected from the group consisting of tungsten carbide, silicon carbide, tantalum carbide and aluminum carbide;

[claim 15] wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 18] wherein said base member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 19] said cutting member comprises sintered and compacted particles of abrasion resistant material.

However, it is respectfully submitted that the use of such material on cutting teeth is old and well known in the art. For example, Funakubo discloses one example of a disclosure that discusses many of the claimed materials (e.g., see col. 1, the paragraph beginning at line 6) including the materials set forth in the subject claims, and teaches that these materials have been used for their known benefits including improved

durability and strength characteristics. Therefore, it would have been obvious to one having ordinary skill in the art to use the subject materials to make the cutters of Wright for the well known benefits including those described above.

Rejections Over Raetz:

6. Claims 1-3, 6-9, 13-16, 18-20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 **or in the alternative** over Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 and Wright, pn 4,774,278.

**Regarding claims 1-3 and 6-9**, Raetz discloses a **link** (e.g., 3) for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 5 including 6, 7), having a lead end and a rear end, adapted to be pivotally connected to an associated link at each end forming said saw chain (e.g., member 5 is “adapted” in that it has pivot openings (through which components 4 extend) and is fully capable of being pivotally connected to other structure including at each end of the base member and/or at each end of various forms of associated connecting links), said base member comprising a seat surface (e.g., 7 including surfaces 18, 19; see also col. 3, lines 36-37) having a first taper and a lower surface having a second taper; and

a cutting member (e.g., 9) that comprises a cutting edge and releasably engages said base member, said cutting member including an upper surface having a third taper and an under surface having a fourth taper, wherein said first taper and said third taper

extend at an angle ranging from about 0.5 degrees to about 45 degrees relative to a direction of intended chain travel and said second taper and said fourth taper extend at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended chain travel (e.g., the link including the cutting member is fully capable of being oriented at substantially any angle based on the type of operation desired by the user and based on any type or form of supporting structure provided therefor; also, the taper of feature 7 of Raetz is considered to meet the “about” language set forth for the angle range; or see “in the alternative” at the end of this rejection), wherein each pair of tapers is at a close tolerance effective to cause self-locking engagement of said first taper of said seat surface and said third taper of said cutting member surface and of said second taper of said lower surface and said fourth taper of said cutting member surface;

[claim 2] wherein said close tolerance comprises no more than about 1 degree (as best understood);

[claim 3] wherein said close tolerance comprises no more than 0.5 degrees (as best understood);

**Regarding claims 13 and 14**, Raetz discloses every structural limitation of the claimed invention including:

a **saw chain** comprising a plurality of the quick change cutting links of claim 1;

[claim 14] wherein said saw chain is adapted for use on a saw comprising a chain saw, a timber harvester, a buck saw and a saw for cutting wood pallets.

**Regarding claim 15**, Raetz discloses a **link** (e.g., 3) for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 5 including 6, 7), having a lead end and a rear end, adapted to be pivotally connected to a connecting link at each end forming said saw chain (e.g., member 5 is “adapted” in that it has pivot openings (through which components 4 extend) and is fully capable of being pivotally connected to other structure including at each end of the base member and/or at each end of various forms of associated connecting links), said base member comprising a seat surface (e.g., 7 including surfaces 18, 19; see also col. 3, lines 36-37) having a first taper and a lower surface having a second taper; and

a cutting member (e.g., 9) that comprises a cutting edge and releasably engages said seat surface of said base member, said cutting member including an upper surface with a third taper and an under surface with a fourth taper, said second taper and fourth taper extending at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended chain travel.

[claim 16] wherein the first taper and third taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of travel of said cutting member when fastened on a chain (e.g., the cutting member is fully capable of being oriented at substantially any angle based on the type of operation desired by the user and based on any type or form of supporting structure provided therefor; also, the taper of feature 7 of Raetz is considered to meet the “about” language set forth for the angle range; or see “in the alternative” at the end of this rejection), said taper having a close tolerance comprising no more than 0.5°.

**Regarding claim 18**, Raetz discloses a **base member** (e.g., 5 including 6, 7) for a saw chain with almost every structural limitation of the claimed invention including being adapted to be pivotally connected to a connecting link at each end forming said saw chain (e.g., member 52 is “adapted” in that it has pivot openings 57 and is fully capable of being pivotally connected to other structure including at each end of the base member and/or at each end of various forms of associated connecting links), the base member comprising:

a seat surface (e.g., 7 including surfaces 18, 19; see also col. 3, lines 36-37) having an upper taper extending at an angle ranging from about 0.5° to about 45° relative to a direction of intended travel of the base member when fastened on the chain and a lower taper extending at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended travel of the base member when fastened on the chain (e.g., the base member is fully capable of being positioned in such an orientation, particularly based on what structure it is attached/mounted; also, as described in col. 3, lines 1-3, the longitudinal cross section of the cutter passage 14 corresponds to the longitudinal cross section of the stud 7, which may be tapered as described in col. 3, lines 36-37; the taper of feature 14 of Raetz is considered to meet the “about” language set forth for the angle range; or see “in the alternative” at the end of this rejection), said upper taper being adapted to mate with a top taper on an associated cutting member and said lower taper being adapted to mate with a bottom taper on an associated cutting member, each taper having a close tolerance comprising no more than 0.5° to the mating taper of said associated cutting member (e.g., as best

understood, the base member is fully capable of having such a taper particularly given a suitable cutting member, wherein the cutting member is not part of the claimed base member);

**Regarding claims 19, 20, 23 and 24**, Raetz discloses a **link** (e.g., 3) for a saw chain with almost every structural limitation of the claimed invention including:

a base member (e.g., 5 including 6 and 7), having a lead end and a rear end, adapted to be pivotally connected to a connecting link at each end forming said saw chain (e.g., member 5 is “adapted” in that it has pivot openings (through which components 4 extend) and is fully capable of being pivotally connected to other structure including at each end of the base member and/or at each end of various forms of associated connecting links), said base member comprising a seat surface (e.g., 7 including surfaces 18, 19; see also col. 3, lines 36-37) having a first taper, a lower surface having a second taper, and a stop surface (e.g., one of the various surfaces as viewed in Fig. 1) located upstream of said seat surface relative to the direction of travel of the chain; and

a cutting member (e.g., 9) that comprises a cutting edge and releasably engages said seat surface of said base member, said cutting member including an upper surface having a third taper and an under surface having a fourth taper, wherein said first taper and said third taper extend at an angle ranging from about 0.5° to about 45° relative to a direction of intended chain travel, and said second taper and said fourth taper extend at an angle of about 0.5 degrees to about 45 degrees relative to a direction opposite of intended chain travel (e.g., the link including the cutting member is fully capable of being

oriented at substantially any angle based on the type of operation desired by the user and based on any type or form of supporting structure provided therefor; also, the taper of feature 7 of Raetz is considered to meet the “about” language set forth for the angle range; or see “in the alternative” at the end of this rejection) wherein each pair of tapers is at a close tolerance effective to cause locking engagement of said first taper of said seat surface and said second taper of said cutting member surface;

[claim 20] wherein said close tolerance comprises no more than 0.5 degrees (as best understood);

[claim 23] wherein said first taper and said second taper extend upwardly or downwardly from a location near said cutting edge in a direction opposite to said direction of chain travel;

[claim 24] wherein said angle is about 10 degrees or less.

**Raetz lacks** the specific material designations for each of the base member and the cutter member, as follows:

[claim 1] the link of a saw chain wherein said surface has the second taper constructed from sintered and compacted particles of abrasion resistant material;

[claim 6] wherein said base member comprises sintered and compacted particles of abrasion resistant material;

[claim 7] wherein said abrasion resistant material comprises at least one of metal and ceramic;

[claim 8] wherein said abrasion resistant material comprises a carbide containing compound;



[claim 9] wherein said carbide containing compound comprises a compound selected from the group consisting of tungsten carbide, silicon carbide, tantalum carbide and aluminum carbide;

[claim 15] wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 16] wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 18] wherein said base member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 19] said cutting member comprises sintered and compacted particles of abrasion resistant material.

However, it is respectfully submitted that the use of such material on cutting teeth is old and well known in the art. For example, Funakubo discloses one example of a disclosure that discusses many of the claimed materials (e.g., see col. 1, the paragraph beginning at line 6) including the materials set forth in the subject claims, and teaches that these materials have been used for their known benefits including improved durability and strength characteristics. Therefore, it would have been obvious to one having ordinary skill in the art to use the subject materials to make the cutters of Wright or Raetz for the well known benefits including those described above.

**In the alternative**, if it is argued that there is no specific disclosure of the claimed taper angle of the stud 7 and the corresponding passage 14 of cutting member 9, the Examiner takes Official notice that to provide taper angles within the claimed range for

fitting cutting teeth to their support structure is old and well known in the art and provides various well known benefits including a self-locking as well as a self-releasing characteristic as taught by Wright (e.g., see col 8, lines 47-61). Therefore, it would have been obvious to one having ordinary skill in the art to provide tapered surface in the claimed range to gain the well known benefits including those described above.

Further Rejections Over Wright or Raetz:

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Wright, pn 4,744,278 in view of Funakubo, pn 3,800,633; **and** over the combination of Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 **or in the alternative** over Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 and Wright, pn 4,774,278 as the above combinations have been applied to claim 1 above, and further in view of any one of Ackley, pn 2,725,083 or Abbott, pn 2,873,775 or Oehrli, pn 3,144,059 or Ehlen, pn 3,308,859 or Carlton, pn 4,901,613.

Each combination lacks:

[claim 5] wherein said base member comprises stamped metal.

However, the Examiner maintains the taking of Official notice that such materials are old and well known in the art and provide various well known benefits including superior strength and durability. Ackley (col. 2, lines 51-53), Abbott (col. 2, lines 9-11), Oehrli (col. 8, lines 43-44), Ehlen (col. 2, lines 41-43) and Carlton (col. 3, lines 60-61) each disclose examples of links having components made from stamped metal.

Therefore, it would have been obvious to one having ordinary skill in the art to use the

subject materials to make the cutters of Wright or Raetz for the well known benefits including those described above.

It is noted that the common knowledge or well-known in the art statement of the previous office action has been taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. See MPEP § 2144.03.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Wright, pn 4,744,278 in view of Funakubo, pn 3,800,633; **and** over the combination of Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 **or in the alternative** over Raetz, pn 3,547,167 in view of Funakubo, pn 3,800,633 and Wright, pn 4,774,278 as the above combinations have been applied to claim 1 above, and further in view of any one of Dawson, pn 3,023,490 or Gaddis et al., pn 4,750,396.

Each combination lacks:

[claim 10] wherein said abrasion resistant material comprises a tool steel alloy.

However, the Examiner maintains the taking of Official notice that such materials are old and well known in the art and provide various well known benefits including superior strength and durability. Dawson (e.g., see the claims, particularly claims 4 and 21) and Gaddis (see the abstract) each disclose examples of cutting members comprising tool alloy steel. Therefore, it would have been obvious to one having ordinary skill in the art to use the subject materials to make the cutters of Wright or Raetz for the well known benefits including those described above.

It is noted that the common knowledge or well-known in the art statement of the previous office action has been taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. See MPEP § 2144.03.

### ***Response to Arguments***

9. Applicant's arguments in the amendment filed on June 23, 2010 have been fully considered but they are not persuasive for at least the reasons previously argued.

Regarding the rejections under 35 USC 112, 2<sup>nd</sup> paragraph, the Examiner respectfully disagrees with applicant's positions as follows.

In the second paragraph on page 9 of the subject response, applicant argues the following regarding claims 1 and 19,

*“Applicant respectfully submits that claims 1 and 19 have been amended to recite that the base member includes a lead end and a rear end, and is adapted to be pivotally connected to an associated connecting link at each end forming the saw chain. Accordingly, Applicant submits that the chain is properly defined as part of the claimed invention, and therefore, the claim is not indefinite or vague.”*

The Examiner respectfully disagrees with applicant's analysis. First, while the base member has been further defined as having a lead end and a rear end, no specific structure has been defined thereby and thus either end could be the lead end and either end could be the rear end, and thus which end is which is a matter of intended use of the claimed base member. Second, it is not clear as to whether the recitation “at each end” refers to the base member or to the associated link, and in the case that it refers to

the associated link, such a recitation must be considered to be a recitation of intended use of the claimed base member and cannot be fairly relied upon to distinguish the claimed invention. Third, while the chain is recited in the claim, the chain is not positively recited as being part of the claimed invention. In other words, the invention is directed, for example in claim 1, to a quick change link for a saw chain, and the base member is adapted to be pivotally connected ... forming the saw chain. Thus, the chain is not positively set forth as part of the claimed invention but rather is recited as an intended use of the claimed link.

In the third paragraph on page 9 of the subject response, applicant argues the following regarding claim 16,

*"With regard to claim 16, the Examiner submits that the phrase "relative to a direction of travel of said cutting member" is vague and indefinite as to how the angle is measured since it is being measured in terms of an intended use of the cutting member and not relative to the structure of the claimed invention. Applicant submits that claim 16 has been amended to depend from independent claim 15, and the amendments have rendered this rejection moot."*

The Examiner respectfully disagrees with applicant's analysis. It is respectfully submitted that the issue is not moot and further that the same issue is now present in claim 15 and thus both claims are vague and indefinite. In other words, claim 15 is directed to a link for use on a saw chain and thus positively defining structure of the link in terms of the saw chain renders the claims vague and indefinite since the saw chain is not part of the claimed invention. Further, the recitation of the saw chain provides no

clear implication of structure of the link and thus the saw chain must be considered as a mere recitation of intended use of the claimed link.

In the fourth paragraph on page 9 of the subject response, applicant argues the following regarding claim 18:

*"Regarding claim 18, the Examiner submits that the recitation "relative to a direction of travel of the base member when fastened on the chain" is vague and indefinite because the base member is being defined in terms of the chain, which is not part of the claimed invention. As amended, however, claim 18 recites that the base member includes a lead end and a rear end and is adapted to be pivotally connected to an associated connecting link at each end forming a saw chain. Accordingly, stating that the taper is angled relative to the direction of intended travel the base member when fastened on the chain, is properly defined, since the chain is part of the claimed invention. Additionally, claim 18 has been amended to recite that each pair of tapers is adapted to mate with a taper on a cutting member and has a close tolerance comprising no more than 0.5° to the mating taper of the associated cutting member, such that the limitation is properly defined."*

The Examiner respectfully disagrees with applicant's analysis for at least the same reasons as described above for claim 1, and Applicant is directed to the Examiner's reasoning for maintaining the rejection above.

In the last paragraph on page 10 of the subject amendment, applicant argues that Wright is directed to a replaceable cutter element for a circular saw and thus lacks a link for a saw chain including connecting links. However, the Examiner respectfully continues to disagree with applicant's analysis. None of the claims are directed to a saw chain. Rather, the claims are directed to a quick change cutting link, or to portions such

as the base member thereof, wherein the cutting link is recited as being for use on a saw chain. Because the recitations directed to the saw chain do not clearly imply or assign any specific structural element/configuration to the link, the recitations directed to the saw chain must be considered to be a recitation of intended use of the cutting link and such recitations of intended use, without clearly implying structure, cannot serve to distinguish the claimed invention over the prior art.

In the first paragraph on page 11 of the subject response, applicant argues that the clevis of Wright comprises only one connection point. However, it is noted that the claims do not clearly require more than one connection point on the claimed link (i.e., the claim is unclear and is fairly interpreted such that the recitation "at each end" refers to the associated connecting link which is directed to the saw chain and thus to an intended use of the claimed invention). Further, applicant argues that "there is no saw chain comprising links that would call for such construction." However, it is respectfully submitted that applicant has not satisfactorily provided support for such a statement; for example, applicant has not provided a list of every saw chain or cutting chain in existence to establish that no such saw or cutting chain exists; and further, applicant cannot be sure that no such saw chain construction will ever be developed. Thus, it is respectfully submitted that applicant's argument is speculative and cannot be relied upon to distinguish the claimed invention over the prior art.

With respect to the prior art rejections over Raetz, It is respectfully submitted that the Examiner's position is generally the same as established for the rejections over Wright. It is emphasized, however, that Raetz discloses that the link is used on a saw

chain and thus also reflects the same or substantially the same intended use as the present invention.

In the second paragraph on page 12, applicant argues that feature 7 of Raetz does not include any tapers. The Examiner respectfully disagrees and again points out that in col. 3, lines 36-37, Raetz discloses that "Stud 7 may taper toward its free end in a conical manner" and thus teaches the necessary taper(s).

For at least the above reasons, it is respectfully submitted that the rejections must be maintained.

**It is noted** that applicant may want to consider exploring additional structural aspects of the connecting structure including the L-shaped connecting configuration and the features thereof to distinguish the claimed invention over the prior art.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/  
Primary Examiner, Art Unit 3724**

cfd  
September 9, 2010